



US ENVIRONMENTAL PROTECTION AGENCY
Region 1 New England - OEME
11 Technology Drive, North Chelmsford, MA 01863

Inspection Report

Date: October 1, 2014
Subject: Misty Knoll Farms - Concentrated Animal Feeding Operation (CAFO)
Inspection
Prepared by: Lisa Thuot – USEPA Compliance Inspector

I. Facility Information:

Name: Misty Knoll Farms
Location #1: 1685 Main Street
New Haven, VT 05472

Location #2: 3830 Ethan Allen Highway
New Haven, VT 05472

Owner/Operator: Rob Litch, Co-owner
John Palmer, Co-owner
Andre Palmer, Co-owner

Mailing Address: (Same as above)

II. Inspection Information:

Date of Inspection: June 26, 2014

EPA Inspector(s): Lisa Thuot – Compliance Inspector (EPA Region 1/OEME)
Diane Boisclair – Compliance Inspector (EPA Region 1/OES)
Facility Contact(s)
During Inspection: Rob Litch, John Palmer, Andre Palmer

State Contact(s): Katie Gehr, VT Agency of Agriculture

Weather Conditions: Fair, approximately 77°F

III. Purpose of Inspection:

The purpose of the inspection was to assess applicability of the CAFO requirements under the Clean Water Act at 40 C.F.R. Part 122.23.

Entry Procedures

The inspection was announced in advance by telephone to Rob Litch. Upon arrival we presented our EPA inspector credentials to the owners, who provided a tour of both farm locations listed above. Inspectors disinfected their rubber boots prior to walking around the farm.

IV. Inspection Information

Misty Knoll Farms (“the farm”) is a poultry operation which raises free-range turkeys and naturally-raised chickens; it has been owned by the Palmers and Mr. Litch since the 1980s. In 2000, they purchased a second location two miles away at 3830 Ethan Allen Highway (Route 7) in New Haven. They have a combined medium farm operation (MFO) permit with the Vermont Agency of Agriculture. In 2006 EQIP funds were used to fund projects for property fencing and clean water diversion at the bird barns.

The turkey flock consists of up to 30,000 birds. There are 7,500 turkeys in the large barn at 1685 Main Street; there is an older smaller barn which holds 2,000 birds but is currently empty. Turkeys are allowed to roam free-range outside and/or in additional barn space for about 15 weeks a year. A seasonal flock of about 15,000 turkeys are raised at a satellite location on South Street in New Haven. Mr. Litch said there were currently no turkeys at the South Street location, which we did not visit during our inspection. There is also a turkey barn at the Route 7 location.

The chicken flock consists of approximately 30,000 birds which stay under cover but are allowed to run around in the barn and pen areas. The chickens have a 7-week growing cycle and the farm receives an average of 5,000 new chicks each week. They do not raise any egg layers. Chickens are raised year-round at the 3830 Ethan Allen Highway location.

Feed is stored in silos at all the farm locations. Bird mortalities are sent off-site to a rendering plant. No antibiotics are administered to the birds. The farm has a private well; water sampling is done twice per year per USDA standards. Hay bedding is used in the bird houses/barns and bedding is supplemented once a week. The owners said used bedding pack is periodically picked up by a local farmer for composting. The farm grows hay on about 200 acres.

The nutrient management plan (NMP) was developed with NRCS, in cooperation with the Otter Creek Natural Resources Conservation Division and the farm owners, who worked to help design their own plan. Records show that manure and compost analyses were done in 2009, and UVM conducted soil testing in 2006, 2008, and in May 2013. Katie Gehr said that she plans to conduct a detailed review of the farm’s NMP in the near future.

1685 Main Street, New Haven VT:

The farm has an on-site slaughterhouse building for bird processing. A new perimeter drain was added around the processing building. About 5,000 chickens are processed per week for 52 weeks a year. Turkeys are processed 10 weeks per year. Process wastewater from the slaughterhouse operations is directed into a 2,500 gallon holding tank, and is then treated through

a series of biofilters and into a pump station, which sends the wastewater into their liquid waste storage structure (i.e. lagoon). The lagoon has diffusers powered by a windmill for aeration. The inspection team observed some woody sumac vegetation growing along the banks of the liquid waste lagoon, which inspectors recommended be removed (picture #1). According to Mr. Licht and Andre Palmer, they have the capability to pump from the lagoon but have not yet land applied from the pond; (water is typically allowed to sit and/or evaporate). They have about 280 acres for land application at 1685 Main Street, and about 86 acres at the Route 7 location.

Once a year turkey manure is removed from the barns. Turkey brooder manure is loaded into tractors or trucks and transported to the compost pad located at the farm on Route 7. All other (non-brooder) turkey manure is picked up by an outside company.

3830 Ethan Allen Highway (Route 7), New Haven, VT:

The chicken barn (#1) located closest to Route 7 has 6 floors and houses up to 25,000 birds; 4 floors are currently in use. Barn #2 has 3 floors and houses up to 15,000 chickens; all floors are in use. The first floor of barn #2 also accommodates turkeys which are brought in during late summer. There is a small vegetated turkey running/exercise area behind barn #2. Bird pens are cleaned out about every 7 weeks. A manure spreading truck transports chicken manure from the barns to the on-site compost pad, which was designed by NRCS. One turkey barn (for flock #4) was empty/not in use during our inspection.

The inspection team did not observe any bird feather or particulate deposition outside the barns or below the ventilation fans (picture #2). The owners said the screens and louvers on fans are periodically cleaned and sanitized, and the fans run on temperature and humidity control cycles.

The manure compost pad was designed by NRCS and installed about 4-5 years ago. The design includes a pond which receives drainage/runoff from the compost pad (pictures #3-4). Pond water is used for irrigation on the adjacent fields. Water is pulled from the pond using a fire truck (with a 500 gallon holding tank) and suction line, and then loaded into a spreader.

The Middlebury Food Cooperative is building a solar array on a section of the Route 7 property as part of a project to generate electricity for the local grid.

V. Exit Briefing

EPA inspectors conducted an exit briefing with Rob Litch and John Palmer. Katie Gehr was also present. The following items were noted:

- Remove woody sumac vegetation growth on the banks of the liquid waste lagoon at the 1685 Main St. farm.
- Katie Gehr will conduct a detailed review of the farm's NMP in the near future.

Enclosures/Attachments:

Aerial maps

Inspection Pictures